



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/797,192

03/11/2004

Kao-Cheng Hsieh

88910-108

4738

22504

7590

03/02/2009

DAVIS WRIGHT TREMAINE, LLP/Seattle
1201 Third Avenue, Suite 2200
SEATTLE, WA 98101-3045

EXAMINER

NGUYEN, KEVIN M

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

03/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,192	Applicant(s) HSIEH, KAO-CHENG	
	Examiner KEVIN M. NGUYEN	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/23/2008 has been entered. An action on the RCE follows:

Claim 7 is amended, and claims 1-6 are cancelled. Thus, claims 7-10 are pending. In view of the amendment, and the applicant's remarks, see pages 9-11 with respect to the amendment have been fully considered and are not persuasive. The amendment necessitated new ground(s) of rejection.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "device identification information is only included in the first and second waveform signals" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

Art Unit: 2629

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as being not enabling. Claimed "a wireless human input device" is NOT enabling to include a first wireless human transmitting unit and a second wireless human unit. Because claimed "a wireless human input device" in preamble claim. Only one wireless human input device is impossible to have the first wireless human transmitting unit and the second wireless human unit. The examiner suggests that "a computer system comprises a plurality of wireless human input devices" in preamble claim composes the first wireless human transmitting unit and the second wireless human unit.

Further, claimed "a wireless human receiving unit..." is impossible in the claim 7. Because, e.g., the wireless computer mouse or the wireless computer keyboard composes the first wireless human transmitting unit or the second human transmitting human unit, respectively.

Thus, the wireless computer mouse or the wireless computer keyboard is impossible to include “a wireless human receiving unit.”

Therefore, the claimed “a wireless input device” is not operable to work.

For the purpose of rejection, claim 7 is supposed to be operable to work.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

When the interpretation of the claim(s) is or may be in dispute, i.e., given one interpretation, a rejection under 35 U.S.C. 102 is appropriate and given another interpretation, a rejection under 35 U.S.C. 103(a) is appropriate.

When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Claims 7-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Umeda (US 5,737,107).

As to claim 7, figure 1 of Umeda discloses a wireless human input device comprising:

a first wireless human transmitting unit having a first timer set with a first time parameter for generating a first leading signal having a first waveform signal (the abstract and figures 3A, B, C, D disclose a transmitter of a wireless trackball device 5, a first timer 1.2ms, a first format information has a first leader code composed of high-level duration 4T and low-level duration 2T); **the first wireless human unit also generating a first data signal** (figure 3A shows pointing information 12 bits); **a second wireless human transmitting unit having a second timer set with a second time parameter for generating a second leading signal having, a second waveform signal** (the abstract and figures 3A, B, C, D disclose a transmitter

Art Unit: 2629

of a wireless keyboard device 4, a second timer 1.6 ms, a second format information has a second leader code composed of high-level duration 4T and low-level duration 4T); **the second wireless human unit also generating a second data signal** (figure 3B shows key code information 12 bits), **wherein the first time parameter and the second time parameter are different such that the wave length of the first waveform signal and the wave length of the second waveform signal are different** (tables 1 and 2 disclose the difference between the first format information and second format information are the low-level durations 2T and 4T); **a wireless human receiving unit for receiving the first leading signal and the second leading signal** (the abstract and figure 1 disclose that an infrared receiver 2 includes a photo receiver 9 for receiving the first leader code and the second leader code); **wherein device identification is only included in the first and second waveform signals** (in the alternate embodiment, Umeda further teaches the device identifier for the keyboard input section 4 is set to ID=4, and the device identifier for the trackball 5 is set to ID=8, col. 8, lines 39-41.)

As to claim 8, the wireless human input device as claimed in claim 7, wherein the first wireless human transmitting unit is a wireless mouse transmitting unit, a wireless keyboard transmitting unit or a wireless touch pad transmitting unit. (Umeda disclose in the abstract and column 8, lines 26-31).

As to claim 9, the wireless human input device as claimed in claim 8, wherein the second wireless human transmitting unit is a wireless mouse transmitting unit, a wireless keyboard transmitting unit or a wireless touch pad transmitting unit. (Umeda disclose in the abstract and column 8, lines 26-31).

As to claim 10, the wireless human input device as claimed in claim 7, wherein the wireless human receiving unit comprises an electronic circuit device for identifying the first leading signal and the second leading signal by the first waveform signal and the second waveform signal. (Figure 1 of Umeda discloses the infrared receiver 2 includes electronic circuit in there, which electrically connected to a photo receiver 9 for receiving first leader code and second leader code).

Response to Arguments

Applicant's arguments filed on 12/23/2008 have been fully considered but they are not persuasive.

With respect to claim 7, the applicant contends that Umeda fails to provide teaching or suggestion for limitation "device identification information is only included in the first and second waveform signals."

In the remarks, the applicant states:

Umeda discloses that a transmitter "selectively send first-format information containing no device identifier and second-format information containing a device identifier." (See Umeda, col. 2, 11.-33-36).

In response, the examiner disagrees. Umeda further teaches in col. 2, lines 42-60:

According to the above-mentioned novel setup, the plurality of transmitters temporally combines the first-format information containing no device identifier and having a higher information transfer rate than that of the second-format information and the second-format information containing a device identifier and having a lower information transfer rate than that of the first-format information, the resultant combined information being sent to the receiver. The receiver determines the type of the source transmitter based on the identifier contained in the second-format information and receives a variety of data coming at the higher transfer rate by the first-format information to perform processing according to the transmitter type on the variety of data, the processed data being supplied to the host controller. Consequently, the novel setup can make the most of the advantage of the high information transfer rate by the first-

format information while determining the type of the source transmitter without trouble by the device identifier contained in the second-format information.

In summary, Umeda discloses first-format information contains temporary no device identifier when the data packet transmits with the higher information transfer rate occurs, because this would prevent troubles by the device identifier contained in the second-format information.

In the remarks, the applicant states:

As described in Umeda, this device identifier is included in the data portion of the signal.

(See Umeda; col. 5, lines 16-22; Fig. 3B).

In response, the examiner disagrees. Umeda further teaches in col. 5, lines 41-65:

In the present embodiment, when the keyboard input section 4 has been operated, the key code information to be outputted from the keyboard input section 4 consists of information (a make code) indicating that a key has been pressed and information (a break code) indicating that the key has been released. Therefore, one byte is enough for the information amount for that indication. The key code information is transmitted by the second-format information containing device identifiers. When the key code information is transmitted, the information of the second format (SC17 in FIG. 4) having the key code information is continuously transmitted as shown in FIG. 4 (A). At the same time, the device identifiers (ID=4 in FIG. 4) of the keyboard input section are transmitted.

When the trackball 5 has been operated in the present embodiment, the pointing information and the switch operation information to be outputted from the trackball 5 consist of a cursor movement and a click switch operation state, so that only one byte is not enough for the indication. Therefore, the pointing information and the switch operation information are transmitted by the first-format information containing no device identifier. When the pointing information and the switch operation information are transmitted, the first-format information (SD17 in FIG. 4) having the pointing information and the switch operation information is transmitted a plurality of times (n times) followed by the device identifier (ID=8 in FIG. 4) of the trackball 5 as shown in FIG. 4 (B).

In summary, Umeda also discloses the device identifiers are included in the first format information and the second format information in which both the first and second formats information transmit data packet to the receiver. Thus, Umeda teaches the device identifiers ID=4 and ID=8 are included in the first and second formats information [of the first and second leaders].

In response to applicant's argument with respect to dependent claims 8-10. These arguments are not persuasive. The reasons are set forth the same as discussed in the response with respect to the independent claim 7 above.

For these reasons, the rejection of claims 7-10 based on Umeda has been maintained.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is (571)272-7697. The examiner can normally be reached on Monday-Thursday from 8:00-5:00.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin M Nguyen/
Primary Examiner, Art Unit 2629

KMN
March 2, 2009